

CLAIMS

1. A wall system comprising a plurality of elongate panel members (2) arranged to extend horizontally between a pair of upright support members (3,4) wherein the panel members (2) are stacked one on top of another in a vertical plane to form a wall of the desired height, wherein the panel members (2) are formed with at least one internal longitudinal chamber (9,10,11,12,13), wherein at least some of the panel members (2) are provided with an elongate reinforcing member (20) extending lengthwise of the chamber, and wherein the reinforcing members (20) are constructed and arranged to have a higher resistance to forces applied in a direction (C) normal to the vertical plane of the wall than parallel to the vertical plane of the wall.
2. A wall system according to claim 1 wherein each reinforcing member (20) comprises a plurality of generally parallel plates (20a,b,c,d) connected by webs (20e,f,g) whereby the reinforcing member (20) is of increased strength in the plane (A) of the plates than at right angles (B) thereto.
3. A wall system according to claim 2 wherein the reinforcing members (20) are arranged so that the plates (20a,b,c,d) extend generally parallel to a plane (A) normal to the vertical plane of the wall.
4. A wall system according to claim 2 or claim 3 wherein each reinforcing member (20) is of approximately W-shape in transverse section.
5. A wall system according to any of claims 2 to 4 wherein each reinforcing member (20) is made of rolled sheet metal.

6. A wall system according to any preceding claim wherein the panel members (2) are made of plastics material.
7. A wall system according to claim 6 wherein the panel members (2) are plastics extrusions.
8. A wall system according to any preceding claim wherein the panel members (2) are of generally hollow rectangular section with spaced parallel side walls (5,6) and longitudinally extending edge formations (7,8) that co-operate to locate adjacent panel members (2) relative to each other on assembly of the wall.
9. A wall system according to claim 8 wherein each panel member (2) is provided with mating tongue and groove formations (7,8) on the opposed edges.
10. A wall system according to claim 8 or claim 9 wherein the panel members (2) are divided internally into a plurality of chambers (9,10,11,12,13) by one or more partition walls (14,15,16,17) extending between the side walls (5,6).
11. A wall system according to any of claims 8 to 10 wherein the panel members (2) are provided with a longitudinal slot (19) in at least one side wall (5,6) that can be used to attach a member to the wall.
12. A wall system according to claim 12 further comprising at least one bracket located and retained in the slot (19) for attaching a member to the wall.

13. A wall system according to any of claims 8 to 12 further comprising glazing located in the wall.

14. A wall system according to claim 13 wherein the glazing is located by glazing members (31,32) arranged to extend above and below a glazing panel (30) with the glazing members (31,32) adapted to co-operate with the edge formations of the adjacent panel members (2).

15. A wall system according to claim 14 wherein the glazing members (31,32) are formed by part of a panel member (2).

16. A wall system according to any preceding claim wherein the support members (3,4) are adapted for inserting the panel members (2) one-by-one between the support members (3,4) at a lower end thereof and raising the panel members (2) to allow the next panel member (2) to be inserted until the desired height of the wall is achieved.